

ABSTRACT OF THE DISCLOSURE

A semiconductor device having a structure in which no short circuit occurs between plug interconnections even when a void occurs in an insulating layer in a gap between wiring layers and a method of

- 5 manufacturing the same are attained. The method includes: a step of forming transfer gates so as to be close to each other with a gap on a semiconductor substrate; a step of burying the gap and covering a wiring layer; a step of opening a contact hole in an insulating layer in the gap portion; a step of depositing a short-circuit preventing insulating film in the
- 10 contact hole; an etch back step of removing the short-circuit preventing insulating film at least on the bottom of the gap to expose the semiconductor substrate; and a step of forming a plug interconnection.